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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,671	11/01/2000	Atsushi Kashitani	040405/0329	9510

22428 7590 07/02/2004

FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER
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JERABEK, KELLY L

ART UNIT	PAPER NUMBER
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2612

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/702,671

Applicant(s)

KASHITANI ET AL.

Examiner

Kelly L. Jerabek

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 5-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3,5.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant elected the first species corresponding to figures 1-11 and 20-21 in the reply filed on 6/4/2004, however the applicant failed to indicate which claims were elected with the first species.

A telephone call was made to Phillip Articola of Foley & Lardner on 6/10/2004 to request an oral election of the claims pertaining to the elected first species, and resulted in the election of claims 1-4.

Claims 5-16 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 6/4/2004.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Rotary Image Viewing Apparatus Connected to a Rotary Mirror Camera".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted Prior Art of figure 28 in view of Applicant's admitted Prior Art of figure 33 and further in view of Whiting et al. US 6,034,716.**

Re claim 1, Applicant's admitted Prior Art of figure 28 shows an electronic periscope consisting of a rotary universal head type camera (400) and a periscope type display apparatus (300) (Specification: page 2). The periscope type display apparatus (300) includes a casing (110) and a finder (108) on the casing for permitting the user to observe a monitor (301) (Specification: page 3, lines 7-14). A user may rotate the casing (110) while observing the monitor (301) (Specification: page 3, lines 20-23). Through the use of an origin sensor (105), an encoder (104) and a gear (302), the camera (400) is then rotated according to the rotation of the casing (110) (Specification: page 3, line 23 - page 4, line 17). Although the applicant's disclosed Prior Art of figure

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28 discloses all of the above limitations, it fails to include a rotary mirror display including a mirror arranged in front of the monitor.

Applicant's admitted Prior Art of figure 33 shows a periscope display apparatus (700) including a monitor (701) for displaying an image, a mirror (102) arranged in front of the monitor (701) at an angle of 45 degrees, a finder (108) for looking into the image on the monitor via the mirror (102), and a casing (110) rotatable together with the mirror (102) about an axis extending through the center of the display screen of the monitor (701) (Specification: page 10, line 24 – page 11, line 24; fig. 33). Also, the mirror (102) is fixed to the casing (110) via a ring gear (106) so that when the casing (110) is rotated the mirror (102) is rotated in the display direction of the monitor (Specification: page 10, line 26 – page 11, line 12). Therefore, it would have been obvious for one skilled in the art to have been motivated to include the periscope display apparatus (700) with a rotary mirror as disclosed by Applicant's admitted Prior Art of figure 33 in the electronic periscope consisting of a rotary universal head type camera (400) and a periscope display apparatus (300) as disclosed by Applicant's admitted Prior Art of figure 28. Doing so would provide a means for inverting an image by sending it through a mirror and to a finder (Specification: page 12, lines 16-22). Although the combination of the Applicant's admitted Prior Art of figure 28 and the Applicant's admitted Prior Art of figure 33 includes the above limitations, it still fails to disclose a rotary mirror camera assembly including a mirror arranged in front of the camera and a mirror rotating mechanism to rotate the mirror about the light axis of the camera according to the rotation of a casing of a display device.

Whiting discloses in figures 1 and 2, a camera (10) including a rotating mirror (16) (col. 5, lines 13-24). The mirror (16) is arranged in front of the camera (10) (col. 5, lines 17-24; figs. 1, 2) at an angle (45 deg) relative to the light axis of the camera (10) (col. 5, lines 57-60). There is also a motor (26) for rotating the mirror about the light axis of the camera (10) (col. 5, lines 25-30; figs. 1,2). Therefore, it would have been obvious for one skilled in the art to have been motivated to include the camera including a rotating mirror as disclosed by Whiting in the electronic periscope consisting of a rotary universal head type camera (400) and a periscope display apparatus (700) with a rotary mirror as disclosed by Applicant's admitted Prior Art of figure 28 in view of Applicant's admitted Prior Art of figure 33. Doing so would provide a means for rotating only the mirror (16) and not the camera (10) in order to achieve a constant reference point (col. 5, lines 31-40).

Re claim 2, the electronic periscope disclosed by Applicant's admitted Prior Art of figure 28 establishes correspondence between the angular position of the casing (110) and the angular position of the camera (401) (Specification: page 4, lines 5-8). There is a method to match the orientation (north, south, east and west) of the user looking into the finder (108) and an orientation of the camera (401) (Specification: page 4, lines 8-11). Additionally, the Prior Art mentions that relative angular displacement of the orientation of the user and the orientation of the camera may be matched (Specification: page 4, lines 23-27). Therefore, since relative angular displacement is mentioned it can be seen that an angle between an image pick-up direction along a light axis of the

camera and the display direction of the monitor is within a range greater than or equal to 90 degrees and smaller than or equal to 270 degrees. The range of angles mentioned here is consistent with setting an angular displacement of the orientation of the user and the orientation of the camera at one of the four standard directions of a compass rose (north, south, east and west).

Re claim 3, Applicant's admitted Prior Art of figure 33 shows a periscope display apparatus (700) including a monitor (701) for displaying an image and a mirror (102) arranged in front of the monitor (701) (Specification: page 10, line 24 – page 11, line 4). A circular window having an opening portion (106) is arranged between the monitor (701) and the mirror (102) for the monitor (Specification: page 10, line 27 – page 11, line 2; figure 33). An image displayed on the monitor (701) is provided to a user as an image through the mirror (102) for the monitor and the finder (108) (Specification: page 11, lines 1-7).

Re claim 4, the electronic periscope disclosed by Applicant's admitted Prior Art of figure 28 establishes correspondence between the angular position of the casing (110) and the angular position of the camera (401) (Specification: page 4, lines 5-8). There is a method to match the orientation (north, south, east and west) of the user looking into the finder (108) and an orientation of the camera (401) (Specification: page 4, lines 8-11). Additionally, the Prior Art mentions that relative angular displacement of the orientation of the user and the orientation of the camera may be matched (Specification:

page 4, lines 23-27). Therefore, since relative angular displacement is mentioned it can be seen that an angle between an image pick-up direction along a light axis of the camera and the display direction of the monitor is within a range greater than or equal to 90 degrees and smaller than or equal to 270 degrees. The range of angles mentioned here is consistent with setting an angular displacement of the orientation of the user and the orientation of the camera at one of the four standard directions of a compass rose (north, south, east and west).

Applicant's admitted Prior Art of figure 33 shows a periscope display apparatus (700) including a monitor (701) for displaying an image and a mirror (102) arranged in front of the monitor (701) (Specification: page 10, line 24 – page 11, line 4). A circular window having an opening portion (106) is arranged between the monitor (701) and the mirror (102) for the monitor (Specification: page 10, line 27 – page 11, line 2; figure 33). An image displayed on the monitor (701) is provided to a user as an image through the mirror (102) for the monitor and the finder (108) (Specification: page 11, lines 1-7).

### ***Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is 703-305-8659. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

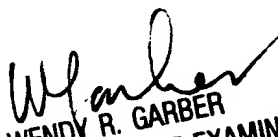
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number



for submitting all Official communications is 703-872-9306. The fax phone number for submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at 703-746-3059.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KLJ

  
WENDY R. GARBER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600